

**Tempe Fire Department Policies and Procedures**  
**SCBA Rescue Harness System**  
**205.05**  
**Rev 04-21-05**

**PURPOSE**

The components of this system are designed to assist in an emergency rescue or escape from a fire or dangerous situation. It converts a SCBA harness to a full body harness (class 3) and enables one to rappel from an upper floor or roof. This system is not a mountain climbing or technical rescue harness and has no fall arrest system as supplied. The converted full body harness is also useful in dragging a downed Firefighter to safety. The line portion can also be used for orientation in search or in hoisting small tools or hose lines.

Firefighting and all of the related activities are inherently and unavoidably dangerous. Even the correct use of this equipment could result in injury or death. It is impossible to cover all the possibilities of use or misuse of this system. Some uses are depicted here. There is no substitute for instruction by a trained competent person.

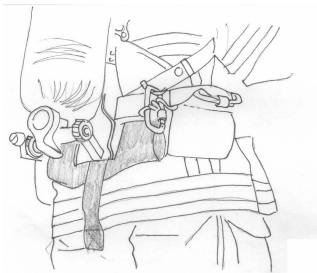
**PROCEDURE**

All drills conducted with this apparatus are to have a safety person present that just oversees the operation. Each unit will be placed back into service in the ready state after use and packed as depicted in this policy.

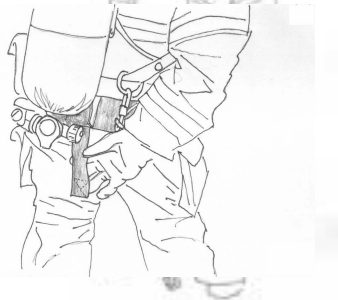
**Characteristics**

- All components are rated above a 15 to 1 safety factor for a 250 lb. Load.
- All components are fire resistive.
- Light weight and no interference with SCBA harness or operation.

**Preparing for a rappel**



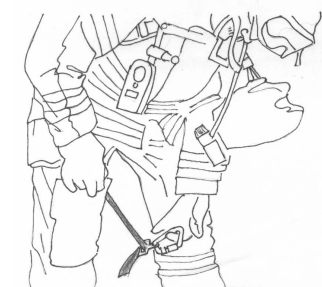
Leg loop pouch



Pull tail to open



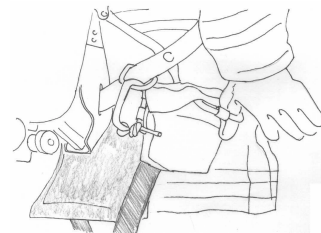
Leg loops deployed



Pull leg loop strap  
between legs



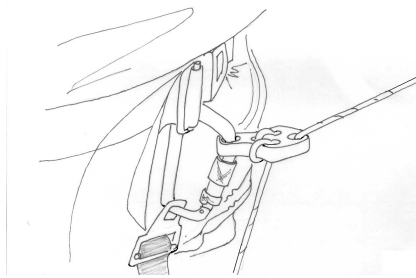
Attach waist carabineer to waist  
buckle and tighten with tail



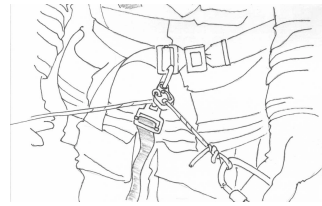
Grab anchor carabineer  
from pouch



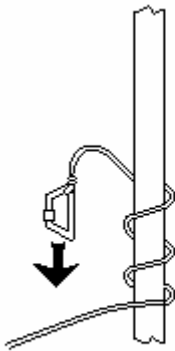
Pull carabiner, line and descender free



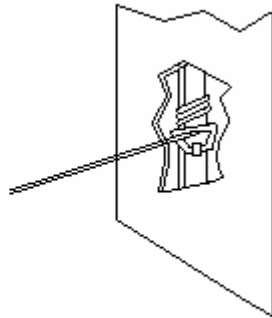
Attach descender to waist carabiner, line to right



Pull enough line through descender for anchoring



Wrap a strong anchor (ex. pipe, wall stud) several times and clip carabiner back on line (tensionless anchor)



Rappel to safety.

Stay calm. Plan your escape. Try and isolate yourself from the fire by shutting doors, etc. in order to buy some time. If you have a tool it can be used as an anchor in the corner of a window. If not, a chair, table, or even an exposed stud in a sheetrock wall can be used as an anchor. 50' of line will get you off of a 4-5 story roof depending on your distance from the anchor point. Roofs have vent pipes that make good anchors. If you are so high that your 50' line will not reach the ground, it should take you to a floor beneath the fire.

#### Safety

- The harness carabiner is attached to keep you from rappelling off of the line.
- Control descent rate by grip of right hand on line to descender. Bring your hand next to your hip and twist for more braking.
- Balance with left hand on top line from descender and feet against the wall (if next to wall).
- When training always use a harness and belay line that is rated for life safety to NFPA standards as a back up system.
- Make sure all carabiners are locked when in use.
- All components need inspection daily, at shift change, and after each use to check for cleanliness and damage. If any damage is found on inspection at the beginning of shift, take that system out of service until repaired or replaced.

THIS APPARATUS IS NOT A MOUNTAIN CLIMBING HARNESS OR ROPE. EVEN THOUGH RATINGS ARE HIGH ENOUGH TO HOLD A PERSON WITH A SAFETY FACTOR, ALL TRAINING MUST INCLUDE A BELAY LINE WITH AN APPROVED LIFE LINE ATTACHED TO THE PERSON DESCENDING AND SAFETY PERSON PRESENT.

## Other uses

- Attach their leg loops whenever trying to drag a downed Firefighter using his SCBA harness. Use your leg loop strap to attach to the Firefighter's harness and tow them.
- Use a downed Firefighter's system to lower them to safety (shown later).
- Use the line in poor visibility for orientation. Attach it to a hose line or another object with the anchor carabiner and let the line feed out of the pouch while you search, then follow the line back to the known location. The harness carabiner will stop you at 50'.
- Use the line to hoist small tools (shown later).

## System Components & Ratings

2-Locking 6000 Lb Carabiners

1-Self-locking 6000 Lb Carabiner

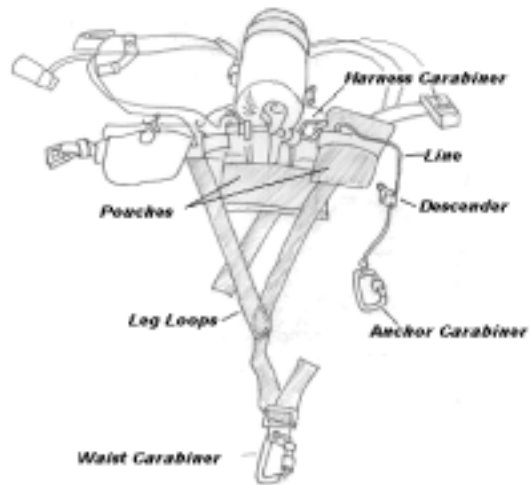
50' of Kevlar 3/16" line covered with Dacron  
4000 Lb

1-PMI Descender 4000 Lb

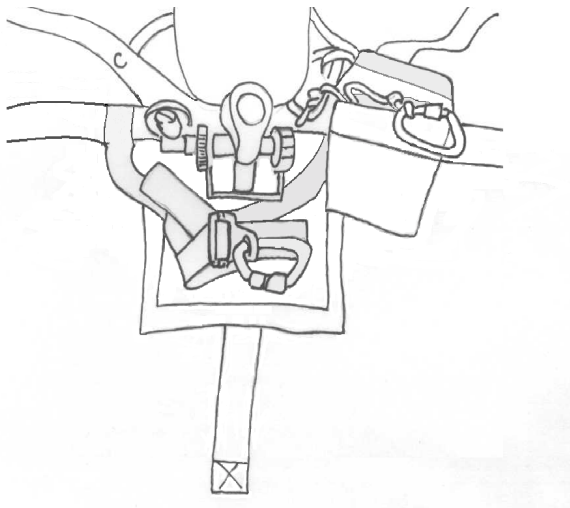
1-Leg loop assembly 1 1/2" Kevair 6000 Lb

1-Adjusting steel buckle with Carabiner  
attachment

2-Pouches, one folding, one with flap

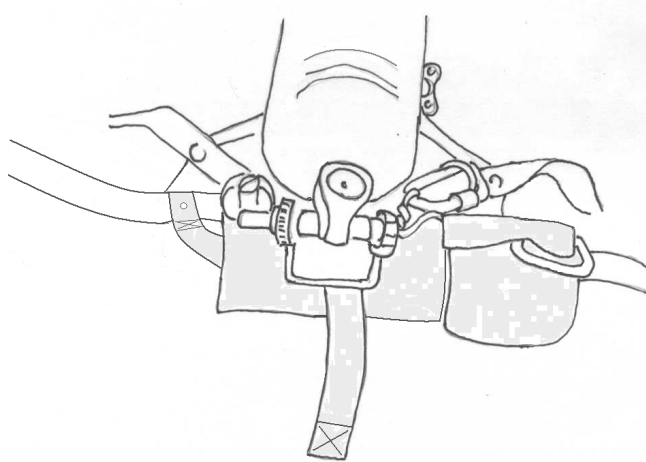


## Packing the System



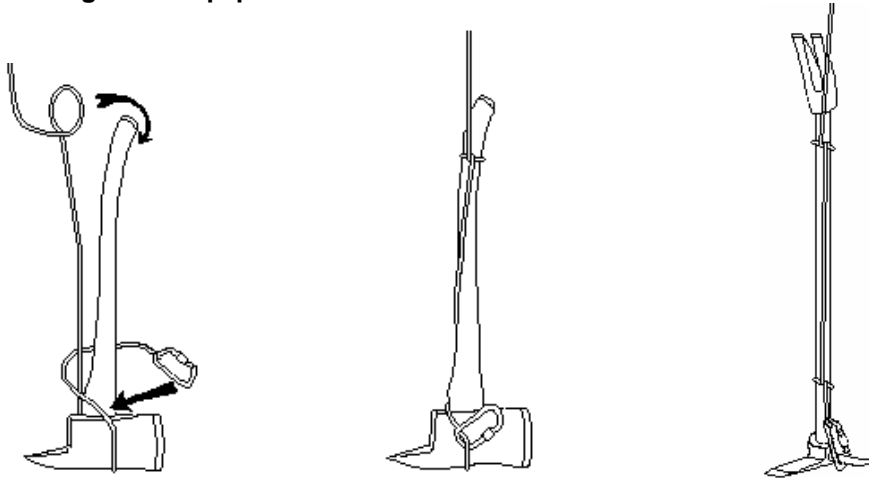
Fold the leg loops back and forth in the open fanny pouch with the buckle and the carabiner on the top. Fold the pouch and connect the full thickness of the Velcro.

Attach the harness carabiner and pack the line into the bag. The descender should be 12 to 18 inches from the anchor carabiner. Pack the anchor carabiner under the flap as shown with portion showing for easy removal.

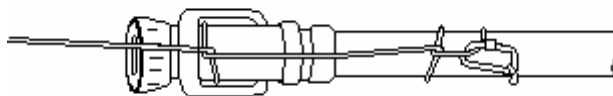


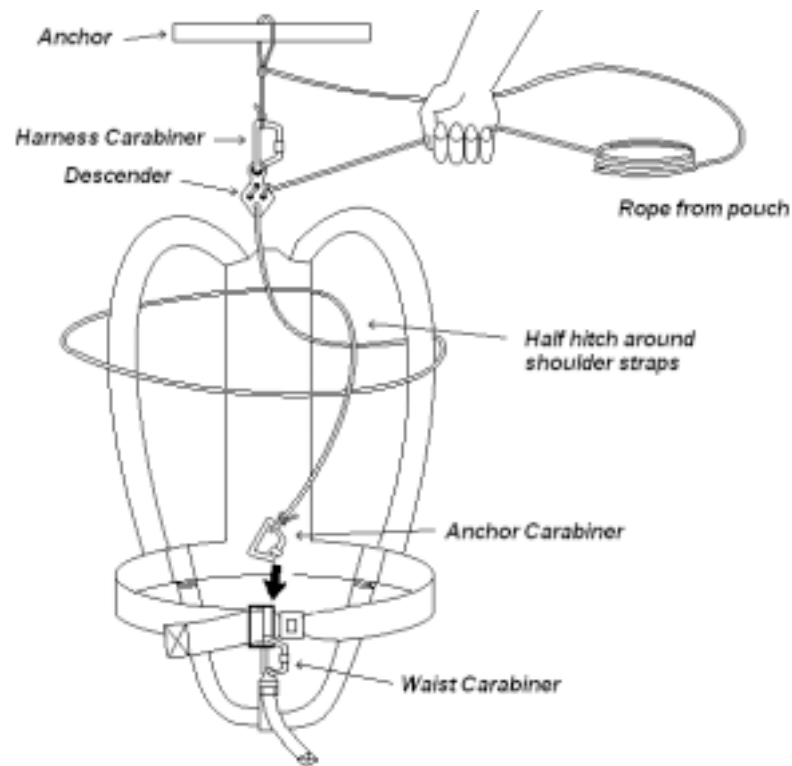
When the system is packed, and in its ready state, it is neatly tucked behind the wearer and unnoticeable. The weight added to the SCBA is less than 2 pounds.

### Hoisting Small Equipment



For an axe, place the axe on the line hold the line against the handle while taking the anchor carabineer around the line and handle and clipping it back on itself. Then form a half hitch around the handle. For a Haligan just slip the carabineer over the hook and put a half hitch near it on the handle and another up the handle toward the fork. For a nozzle use a clove hitch on the hose with a half hitch at the tip, going through the bail first. For a pike pole use a clove with a half hitch at the hook and hoist hook up.





## Buddy Rescue

Rescue your downed buddy by putting their harness carabineer at the anchor by tying with the line. The line will have to be removed from their pouch to do this. Lay the line out neatly to avoid tangles.

Attach their leg loops to the waist strap with the waist carabineer and tighten with the tail.

Now attach their descender to the anchor with the harness carabineer. Pull enough line through the descender to pass their anchor carabineer under both shoulder straps and form a half hitch before you attach it to the waist carabineer. This configuration will keep them upright while in descent.

Hold the line coming from the descender while you place them over the edge. You control their descent from the anchor point by the amount of force you put on the line.